

REPLACED BY
ART 34 AMDT

We claim:

1. A process for selectively hydrogenating citronellal to
5 citronellol in which a liquid phase, in which the citronellal
is dissolved and particles of a catalyst are suspended which
is capable of preferentially hydrogenating carbon-oxygen
double bonds over carbon-carbon double bonds, is conducted
10 through a device which inhibits the transport of the catalyst
particles in the presence of a hydrogen-containing gas.
2. A process as claimed in claim 1, wherein the active component
of the catalyst comprises ruthenium.
- 15 3. A process as claimed in claim 1 or 2, wherein the device
inhibiting the transport of the catalyst particles has
orifices or channels whose hydraulic diameter is from 2 to
2000 times the average diameter of the catalyst particles.
- 20 4. A process as claimed in any of the preceding claims, wherein
catalyst particles having an average diameter of from 0.0001
to 2 mm are used.
5. A process as claimed in any of the preceding claims, wherein
25 the device inhibiting the transport of the catalyst particles
is a dumped packing, a knit, an open-celled foam structure or
a structured packing element.
6. A process as claimed in any of the preceding claims, wherein
30 the liquid phase and the hydrogen-containing gas are
conducted through the device inhibiting the transport of the
catalyst particles at a superficial velocity of more than 100
 $\text{m}^3/\text{m}^2\text{h}$.
- 35 7. A process as claimed in any of the preceding claims, wherein
the surfaces of the device facing toward the liquid phase
have a roughness in the region of from 0.1 to 10 times the
average diameter of the catalyst particles.
- 40 8. A process as claimed in any of the preceding claims, wherein
the liquid phase further comprises an inert diluent.